

Amendments to the Drawings

Attached hereto is Fig. 6, which was inadvertently not enclosed with the original application. Support for Fig. 6 is found throughout the specification and US Patent No. 6,599,781, a priority document to the present case and which has been specifically incorporated into the present application by reference.

REMARKS

Claims 1-32 and 36-56 are pending in this case. The Examiner has indicated that Claims 1-32 are allowable. Claims 33-35 have been canceled and new Claims 36-56 have been added. No claim has been amended. Support for certain new claims is provided hereinbelow. No new matter has been added.

Support for new Claim 36 can be found, for example, at page 45, lines 5-18 and page 29, lines 18-21 of the specification.

Support for new Claim 37 can be found, for example, at page 15, lines 15-17 and page 19, lines 12-17 of the specification.

Support for new Claim 38 can be found, for example, at page 50, lines 1-6, page 53, lines 18-28, page 48, lines 9-15 and page 15, lines 12-14 of the specification.

Support for new Claim 39 can be found, for example, at page 17, lines 27-28, page 15, lines 22-23, page 48, lines 9-15, page 5, lines 26-29 and page 16, lines 1-3 of the specification.

Support for new Claim 40 can be found, for example, at page 22, lines 4-6, page 27, lines 3-4 and page 20, lines 24-26 of the specification.

Support for new Claim 41 can be found, for example, at page 69, lines 2-8 and page 38, line 30 - page 39 line 2 of the specification.

Support for new Claim 42 can be found, for example, at page 44, lines 4-12 of the specification.

Support for new Claim 43 can be found, for example, at page 44, lines 16-20 and page 45, lines 15-18 of the specification.

Support for new Claim 44 can be found, for example, at page 29, lines 8-11, page 63, line 18, and page 18, lines 23-25 of the specification.

Support for new Claim 45 can be found, for example, at page 19, lines 18-26 of the specification.

Support for new Claim 46 can be found, for example, at page 21, lines 15-23, page 19, lines 1-5, page 19, lines 12-17 and page 19, line 18-26 of the specification.

Support for new Claim 47 can be found, for example, at page 73, lines 21-25, page 74, line 25 and page 73, lines 26-28 of the specification.

Support for new Claim 48 can be found, for example, at page 73, line 26 - page 74, line 23 of the specification.

Support for new Claim 49 can be found, for example, at page 74, lines 9-15 and page 73, line 26 - page 74, line 23 of the specification.

Support for new Claim 50 can be found, for example, at page 74, lines 26-29 of the specification.

Support for new Claim 51 can be found, for example, at page 59, lines 1-3, page 59, lines 4-6 and page 16, lines 5-6.

Objections to the Specification

The Examiner has objected to the Specification due to the following informalities:

At page 2, line 7, "Fig. 4" should read --Fig. 1--, page 26, line 14, "PN junction region 43" is not described or labeled in the drawings. Appropriate correction has been made.

At page 6, line 17, page 30, line 23, page 31, line 22, page 32, line 1, page 33, line 1, page 40, line 30, page 72, line 28, Fig. 6 is listed in the Brief Description of the Drawings in the Specification but not contained in the drawings.

In response, Applicant states that, as discussed above, Fig. 6 is enclosed herewith. Specifically, Fig. 6 (atomic IC array) includes three linear arrays 61, 61', and 61'' of mixed doped semiconductor atoms 66 and insulating atoms or molecules 69, embedded in four p-type (62 and 64) and n-type (63 and 65) semiconductor regions.

The Examiner further states that the Specification has been checked for minor errors, but requests Applicant's cooperation in identifying any additional errors. Applicant appreciates the Examiner's assistance and further has checked the specification for errors and made appropriate corrections.

Section 112, Second Paragraph, Rejections (Indefiniteness)

The Examiner has rejected Claims 33-35 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner states that "wide" as used in Claim 33 is indefinite, and Claims 34 and 35 are rejected as depending from Claim 33.

As Claims 33-35 have been canceled, this rejection is moot with respect thereto. Moreover, new Claim 36 recites "thick", as suggested by the Examiner. Accordingly, Applicant respectfully submits that this rejection is obviated.

Applicant respectfully submits that the claims are in condition for allowance, and an early Notice of Allowance is earnestly requested. Please direct any questions concerning this Response to Applicant's undersigned representative.

Respectfully submitted,



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